

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appln. No: To Be Assigned
Applicant: Leon Bryn et al.
Filed: Herewith
Title: LOOM AND METHOD OF WEAVING THREE-DIMENSIONAL WOVEN FORMS
WITH INTEGRAL BIAS FIBERS
TC/A.U.:
Examiner:

Which is a divisional of:

Appln. No: 09/956,641
Applicant: Leon Bryn et al.
Filed: September 20, 2001
Title: THREE-DIMENSIONAL WOVEN FORMS WITH INTEGRAL BIAS FIBERS AND
BIAS WEAVING
TC/A.U.: 3765
Examiner: R. Muromoto, Jr.
Confirmation No.: 2287
Docket No.: BRM-100US

INFORMATION DISCLOSURE STATEMENT

Mail Stop Patent Application
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Pursuant to 37 C.F.R. §§ 1.97 and 1.98 and to the duty of disclosure set forth in 37 C.F.R. § 1.56, the Examiner in charge of the above-identified application is requested to consider and make of record the references listed on the PTO 1449 (RP) submitted herewith.

Although the information submitted herewith may be "material" to the Examiner's consideration of the subject application, this submission is not intended to constitute an admission that such information is "prior art" as to the claimed invention.

In accordance with 37 C.F.R. § 1.97(g), the filing of this Information Disclosure Statement shall not be construed to mean that a search has been made.

Under 37 C.F.R. § 1.98(d), copies of the patents and publications listed on the enclosed PTO Form 1449 are not required to be provided, because they were cited by or submitted to the Patent and Trademark Office in prior application Serial No. 09/956,641, filed September 20, 2001, which is relied upon for an earlier filing date under 35 U.S.C. § 120.

This Information Disclosure Statement is being filed concurrently with the above-referenced application.

Respectfully submitted,



Kevin R. Casey, Reg. No. 32,117
Lowell L. Carson, Reg. No. 48,548
Attorneys for Applicants

LLC/lrb

Enclosures: Form PTO/SB/08 (2 pgs.)

Dated: March 2, 2004

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The Commissioner for Patents is hereby
authorized to charge payment to Deposit
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Date of Deposit: March 2, 2004

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Kathleen Libby

Substitute for Form 1449A/PTO

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Complete if Known

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|----------------------|----------------|
| Application Number | To Be Assigned |
| Filing Date | Herewith |
| First Named Inventor | Leon Bryn |
| Art Unit | |
| Examiner Name | |
| Attorney Docket No. | BRM-100US1 |

SHEET 1 of 2**U.S. PATENT DOCUMENTS**

| Examiner Initials* | Cite No. ¹ | Document Number | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear |
|--------------------|-----------------------|--------------------------------------------|-------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|
| | | Number - Kind Code ² (if known) | | | |
| | 1 | US-6,129,122 | 10-10-2000 | Bilisik | |
| | 2 | US-6,019,138 | 02-01-2000 | Malek et al. | |
| | 3 | US-5,981,022 | 11-09-1999 | Min et al. | |
| | 4 | US-5,783,279 | 07-21-1998 | Edgson et al. | |
| | 5 | US-5,775,381 | 07-07-1998 | Addis | |
| | 6 | US-5,657,795 | 09-19-1997 | Sawko et al. | |
| | 7 | US-5,465,760 | 11-14-1995 | Mohamed et al. | |
| | 8 | US-5,451,448 | 09-19-1995 | Sawko et al. | |
| | 9 | US-5,435,352 | 07-25-1995 | Yamamoto et al. | |
| | 10 | US-5,431,193 | 07-11-1995 | Mood et al. | |
| | 11 | US-5,399,418 | 03-21-1995 | Hartmanns et al. | |
| | 12 | US-5,394,906 | 03-07-1995 | Farley | |
| | 13 | US-5,375,627 | 12-27-1994 | Iida et al. | |
| | 14 | US-5,137,058 | 08-11-1992 | Anahara et al. | |
| | 15 | US-5,085,252 | 02-04-1992 | Mohamed et al. | |
| | 16 | US-Re. 33,418 | 11-06-1990 | Krueger | |
| | 17 | US-4,782,864 | 11-08-1988 | Abildskov | |
| | 18 | US-4,671,470 | 06-09-1987 | Jonas | |
| | | US- | | | |
| | | US- | | | |

FOREIGN PATENT DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Foreign Patent Document | Publication Date (MM-DD-YYYY) | Name of Patentee or Applicant of Cited Document | Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear | T ⁶ |
|--------------------|-----------------------|-------------------------------------------------------------------------------------|-------------------------------|-------------------------------------------------|---------------------------------------------------------------------------|--------------------------|
| | | Country Code ³ - Number ⁴ - Kind Code ⁵ (if known) | | | | |
| | 19 | JP-8134747 (Abstract Only) | 05-08-1996 | Meidai Co. Ltd. | | <input type="checkbox"/> |
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Examiner
SignatureDate
Considered

*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

²See Kind Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04.

³Enter Office that issued the document, by the two-letter code (WIPO Standard St.3).

⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document.

⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible.

⁶Applicant is to place a check mark here if English language translation is attached.

The collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

SHEET 2 of 2

Complete if Known

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| Application Number | To Be Assigned |
| Filing Date | Herewith |
| First Named Inventor | Leon Bryn |
| Art Unit | |
| Examiner Name | |
| Attorney Docket No. | BRM-100US1 |

NON-PATENT LITERATURE DOCUMENTS

| Examiner Initials* | Cite No. ¹ | Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published | T ² |
|-----------------------|--------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|
| | 20 | S. Wilson et al., "SPARC" 5 Axis, 3D Woven, Low Crimp Preforms," 43rd International SAMPE Symposium and Exhibition May 31-June 4, 1998, published in Resin Transfer Molding, Society for the Advancement of Material and Process Engineering Monograph No. 3, at pages 101-113 (May 1999). | <input type="checkbox"/> |
| | 21 | S. Clarke, "Engineered Textile Preforms for RTM: A Comparison of Braiding, Knitting, and Weaving Technologies," 29th International SAMPE Technical Conference October 28-Nov. 1, 1997, published in Resin Transfer Molding, Society for the Advancement of Material and Process Engineering Monograph No. 3, at pages 15-23 (May 1999). | <input type="checkbox"/> |
| | 22 | H. Kipp, Narrow Fabric Weaving, pp. 221-227 (1989). | <input type="checkbox"/> |
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| Examiner Signature | | Date Considered | |
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to Applicant.

¹Applicant's unique citation designation number (optional).

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